

An Evaluation of International Nursing Education Using Interactive Desktop Video Conferencing

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Distance learning has emerged as an accepted means for linking students in remote locations to learning situations that otherwise are not available to them. Until recently, the only college students who could benefit from an international educational experience (i.e., study abroad) were those who could afford it financially and those who could leave the country for an extended period of time. Distance learning technology made an international nursing education experience available to a few students in the United States (US) and England (UK). The project examined women's health care issues in the UK and the US through the interactive distance learning medium of desktop video conferencing. The project was taught jointly by the nursing faculty from institutions of higher education in both the United States and England, and involved students from both countries. Using a case study approach for discussion and dissemination of information, participants compared health care systems. The sessions focused on communication issues, women's health, advocacy, empowerment, and family-centered care. This article describes the project and focuses on evaluation of its effectiveness.

Project Objectives

The intended objectives for this project included:

1. Comparing, for similarities and differences, maternal/child health care issues through examination of nursing expectations in each country
2. Exploring the similarities and differences in women's health care from a patient's perspective by utilizing case studies and critical incidents
3. Analyzing critical incidents by utilizing nursing theories
4. Developing an appreciation for interrelated and multidisciplinary women's health nursing in international health care systems
5. Assessing desktop video conferencing as a delivery device for an international nursing education course

Description of Students

Eighteen undergraduate students, nine from each country, participated in the course. None had prior involvement in distance education. The American students' ages ranged from early 20's to mid-30s; all were white; eight were female, and one was male. The English students were all white women and in their 20's and 30's. All of the students received partial course credit for their participation.

Format of Video Conferencing Sessions

The equipment used in this project was configured to

provide ease of use. The American desktop workstations were Zenith Z-station, PC based, Pentium system, 166 MHz computers with 24 MRAM and a 2-Gigabyte hard drive. The videoconferencing products installed on the workstations were Armada Cruiser 100 "Meeting Point" software and associated hardware (a digital camera, a telephone handset, and a video card for the computer and necessary wiring). The software allowed real time two-way audio/video connections delivered by ISDN phone lines. The computers in the UK were a different brand, but all had a minimum of 160 MHz, 24 MRAM. All videoconferencing software and hardware were identical at both sites.

Three personal computer (PC's) were used in each country. The original plan was for three students to share a PC, so there would be six students participating in each group discussion, three in the US and three in England. Adherence to this plan was not consistently possible due to irregular attendance patterns and some technology problems (inability to make the dial-up connection). On one occasion there were four English students and five American students in the same discussion group.

A total of seven video conferencing sessions was conducted. The four faculty members from both institutions held an orientation video in which they became familiar with using the technology and finalized the details of the course. A concluding videoconference of the instructors was held to evaluate the project. Each of five one-hour teaching sessions consisted of discussion of a case study or critical incident, which was distributed to both groups of students the week before in order to ensure adequate time to read and discuss the case. Discussion questions were provided, but students asked many questions of their own as they probed the differences in terminology, values, organizations, and roles from each health care system. The case studies and critical incidents became increasingly complex as the sessions progressed. Concomitantly, the students increasingly took charge of the video conferencing time and directed the use of it, leaving instructors free to observe the interaction, rather than to direct the discussion.

Evaluation

Evaluation strategies were developed to address the overall project purposes. Data was collected from the students using two self-report methods, an anonymous written questionnaire and a focused group interview for debriefing. The written questionnaire provided quantifiable data, while the debriefing was designed to promote open discussion among the students about their experience and obtain subjective data not otherwise captured by the

written questionnaire. Both sources of data were examined for consistency and distinctions among the written and verbal responses.

To improve the videoconferences students recommended longer sessions that would allow more detailed discussion of the case studies/critical incidents and that would include some of the physical aspects of care, including pharmacology. Overall, they felt this first videoconference experience went very well. When asked what value their participation had for their nursing practice, students were enthusiastic about the broadening of their outlook about culture, health care systems, and resources. The experience made them look at the big picture, and they gained a better understanding that context makes a difference when making decisions. US students were adamant about the need to increase emphasis on preventive health in the US, citing the need for school nurses as a way of fulfilling this need. They also cited the separateness of social services and health care services in the US as problematic in coordinating care. The American nursing students could see ways to improve health care here that did not necessarily mean instituting a national health plan. Should we do it again? A "YES!" resounded from both sides of the Atlantic.

Conclusions and Recommendations

The overall project purposes were achieved. The instructors were satisfied with the students' increased understanding of the two health care systems. The students also responded that use of the critical incidents and case studies contributed to their increased knowledge of nursing. Based on student Responses and instructors' observation of the sessions, video conferencing was deemed successful in promoting cultural awareness, comparing health care systems, and promoting effective communication utilizing DTV. The case studies and critical incidents were effective devices for focusing discussion on women's health issues and examining the complexities of health care.

The students' learning was primarily related to comparing health care systems and the cultural influences on nursing decision-making, priority setting, and selection of nursing interventions. The tremendous impact that financing mechanisms have on nursing decisions became apparent very quickly. Students discovered that financing of care determines access to care, which has serious ramifications for nursing and its values.

Recommendations for future video conferencing endeavors include the following:

1. Spend the first session on introductions and sound transmission practice. Try to keep the initially formed groups intact throughout the course. Time was lost each week getting reoriented to a slightly different configuration of participants.
2. Dial up early so that all PC's are on line when the students arrive.
3. Use critical incidents written by participating students whenever possible. When such incidents were used, the level of enthusiasm noticeably increased.
4. Encourage students to use nursing theory to gain an understanding of practice, either by giving an assigned nursing theory reading along with the critical incident or using the debriefing session to suggest theoretical perspectives which could have been utilized.
5. Target project objectives to include: broadening of perspective, changing attitudes, increasing cultural awareness, and experiencing information technology and distance learning with the latest in telecommunications. DTV was an effective learning strategy and could be incorporated into more units of the curriculum. Students' enthusiasm for using this method indicated that extending the use of international distance learning through DTV is a worthwhile goal. Given the benefits, the two universities plan to continue to incorporate this distance learning modality and to expand the number of participating students.